

SOLDIERS' FEEDBACK SHAPES NEW TECHNOLOGY

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FORT PICKETT, VA – Soldier feedback from all ranks is one way to ensure that the Army continues to develop impactful innovations that increase our warfighter's advantage on the battlefield. The second Soldier Touchpoint (STP) for the U.S Army's Integrated Visual Augmentation System (IVAS) took place on Fort Pickett from October 28 to November 22, 2019. Members of the 2nd Ranger Battalion and 5th Special Forces Group joined the PM IVAS and Microsoft team for the second round of the project's operational testing. Soldiers performed tasks in staged events both individually and as a team with the current IVAS capability set to test advances and identify shortfalls, which will ultimately form the way ahead for its future developments.



STPs are now a best practice of the Soldier Centered Design (SCD) requirement development model, which was a collaborative effort by Army Futures Command (AFC), Soldier Lethality Cross Functional Team (SL CFT), and Program Executive Office (PEO) Soldier. This collaborative effort will ensure Soldiers are a driving force behind all future Army product designs. IVAS will deliver four capability sets

over a 24-month period with each set increasing in tactical and advanced training capability.

The current IVAS capability set is in its second iteration and is working not only to combine the current wearable weapon technologies on a Soldier, but also be able to monitor individual diagnostics, performance, and location. That data will then be integrated into a squad level platform to ultimately increase Soldiers' situational awareness and overall lethality.

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In order to achieve this, the IVAS team continues to perform multiple comprehensive Soldier-oriented studies that intentionally solicit feedback from the ranks of Soldiers that often see the most action in theater, but that are least often asked how efficiently their weapons perform. Justin Agnew, Platoon Leader, Alpha Company, 1st Platoon, 2nd Ranger battalion at Joint Base Lewis-McChord (JBLM) understands the importance of garnering feedback from all ranks.

“It's really on my guys to give their feedback. It's hard because people usually want to talk to the guys that have rank. But on the rarest of occasions am I going to go into that breach, it's going to be my private or team leader. Those are the guys that should feel good about changing IVAS.”

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The development of technology within the second IVAS capability set has made exponential strides since the first STP in March 2019. STP 1 solicited feedback from Soldiers and Marines from the 82nd Airborne Division, 2nd Marine Easy Company, and 75th Infantry Ranger Regiment. From their feedback, industry was able to compile and analyze their After-Action Review (AAR) reports, correct shortfalls, and integrate both the hardware and software designs for the next wave of Soldiers to reevaluate the equipment just months later.

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The current IVAS capability set was put through grueling scenarios in the Synthetic Training Environment (STE), Land Navigation, Squad Reconnaissance, Cross Functional Team (CFT), and Rapid Target Acquisition (RTA) events in order to test the proof of concept for the current system. After each trial the team collected feedback from Soldiers through both interviews and survey forms in effort to get opinions on the diverse capability set. After each squad spent over a week rotating through the different events, data collected of the full IVAS functions was used in a culminating squad mission. The squad planned and executed a full cross functional mission at nightfall through the forests and training villages of Fort Pickett's large Maneuver Training Center.

Feedback has been largely positive throughout the second Soldier Touchpoint. The integration of the low light sensors is one of many engineering feats. Other upgrades include the unprecedented overlay of thermal and night vision technology. The impact of the hundreds of adjustments made from STP 1 to STP 2 increased the squad's ability to successfully run a standard five-point land navigation course that would customarily take three hours was completed in just one hour. Soldiers no longer have to stop to reassess antiquated maps or compass points, it is all easily accessible on each Soldier's Heads Up Display (HUD). The increased efficiency has the potential to save time and lives.

“I think as far as mission command is concerned, IVAS will help facilitate a more dynamic, diverse, distributed command and control on the battlefield. It'll play a pretty significant role, keeping us a little bit more flexible, a little bit more agile, a little bit faster,” says a MSG with 5th Special Forces Group out of Fort Campbell, Kentucky.

A Weapons Sergeant with 5th Special Forces Group says, “Having multiple different abilities all in one product instead of having thermal, night vision, and navigation such as GPS, maps, compass, and such separate from one another. Having it all integrated in one system and in a heads-up display like this is absolutely beneficial.”

Integrated capabilities that increase communication as well as command and control oversight and decrease the amount of independent wearable systems required saves Soldiers both weight and time. A Sergeant 1st Class with 5th Special Forces Group, can already see the IVAS technology being applied to his role in theater.

“I'm the Intelligence Sergeant for the team, so my focus is primarily on what the enemy is doing, their composition, their disposition, and their location”, he says. “Through IVAS I'm able to take enemy information and efficiently brief the rest of my detachment members on the enemy situation and location. It's definitely a great tool in order to get that accomplished.”

Soldiers appreciated the impact that their feedback made at this touchpoint and will have on the future of the larger Army. Sergeant 1st Class adds, “I've been in the Army for 13 years. I've been on multiple deployments and being able to provide as much feedback as possible will help to better this equipment - I feel honored to be here doing this.”

He continues, “Everything's positive. The whole IVAS capability is really great. As it begins to evolve and develop, it's definitely something in the future that we'll be able to utilize. With us being at war for over 19 years, war evolves man and equipment, and being able to evolve with it and have that fighting edge on the battlefield is going to be huge.”

PM IVAS and Microsoft teams will work to integrate the copious amount of Soldier feedback data into the next iteration of the IVAS capability set in preparation for the STP 3 planned for summer 2021.